

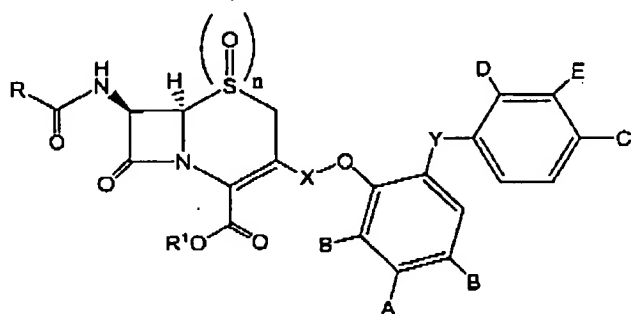
I. AMENDMENTS

In the claims:

This listing of claims will replace all prior versions and listings of claims in the subject application.

Claims 1. to 73. (Currently Canceled).

74. (Currently Amended) A compound having the following structure:



wherein:

n is 0, 1 or 2;

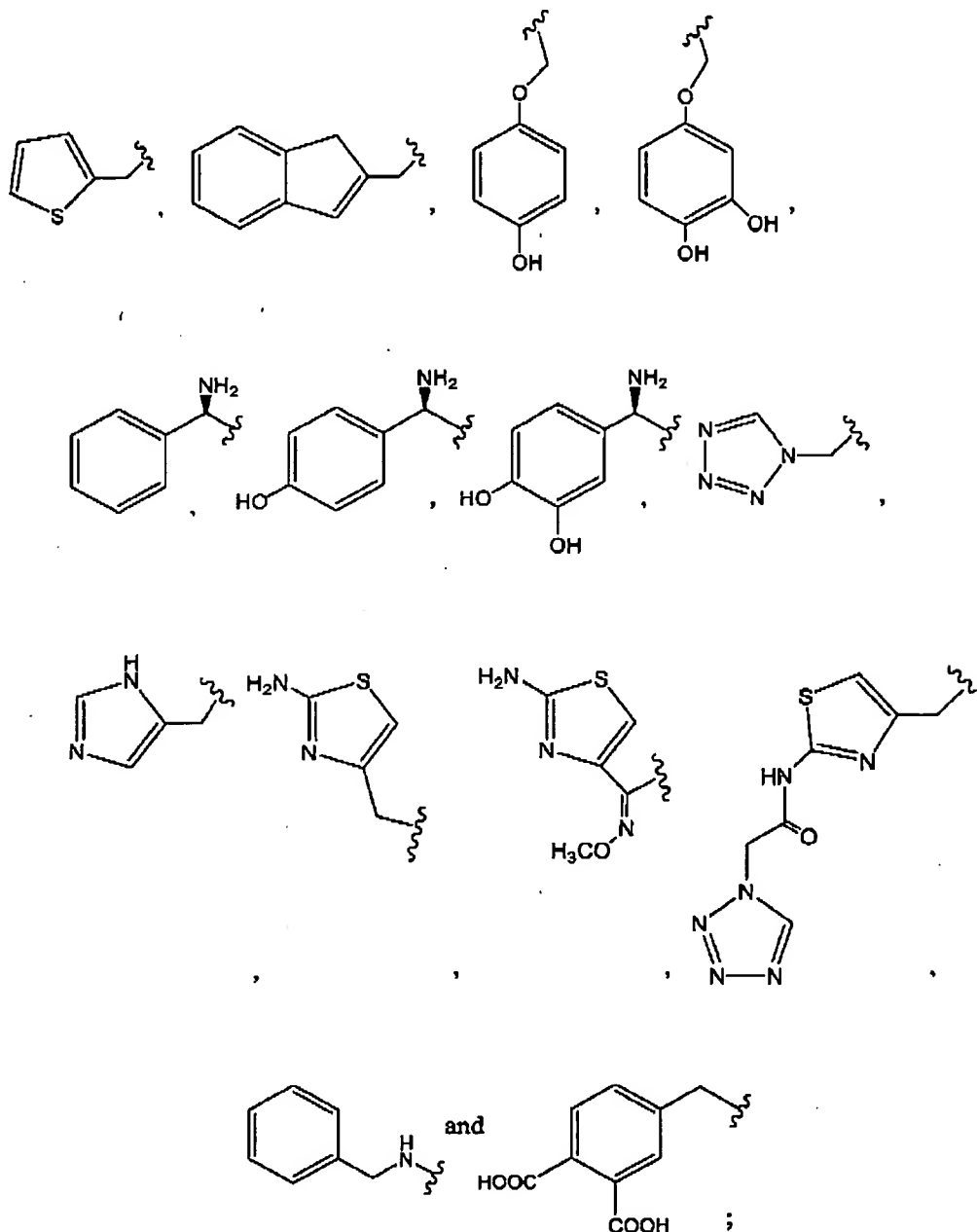
X is selected from the group consisting of CH₂, cis-CH=CHCH₂, trans-CH=CHCH₂, CH₂OC(=O), NHC(=O)O, C≡CCH₂, SO₂, NHCH₂CH₂CH₂NHC(=O) and CH₂C₆H₄OCH₂;

Y is selected from the group consisting of oxygen and C(=O)NH, wherein,

when Y is oxygen, A and D are chlorine and B and E are hydrogen;

when Y is C(=O)NH, B and E are chlorine and A and D are hydrogen;

is selected from the group consisting of CH_3 , HOCH_2CH_3 , HOCH_2 , $\text{H}_2\text{NC}(=\text{NH})\text{NHCH}_2\text{CH}_2$, $\text{HOC}(=\text{O})\text{CH}_2\text{CH}_2$, $\text{H}_2\text{NC}(=\text{O})\text{NH}$, C_6H_5 , $\text{C}_6\text{H}_5\text{CH}_2$, $\text{C}_6\text{H}_5\text{OCH}_2$ and $(\text{PEG})\text{OC}(=\text{O})\text{CH}_2\text{CH}_2$, wherein PEG denotes polyethyleneglycolyl,

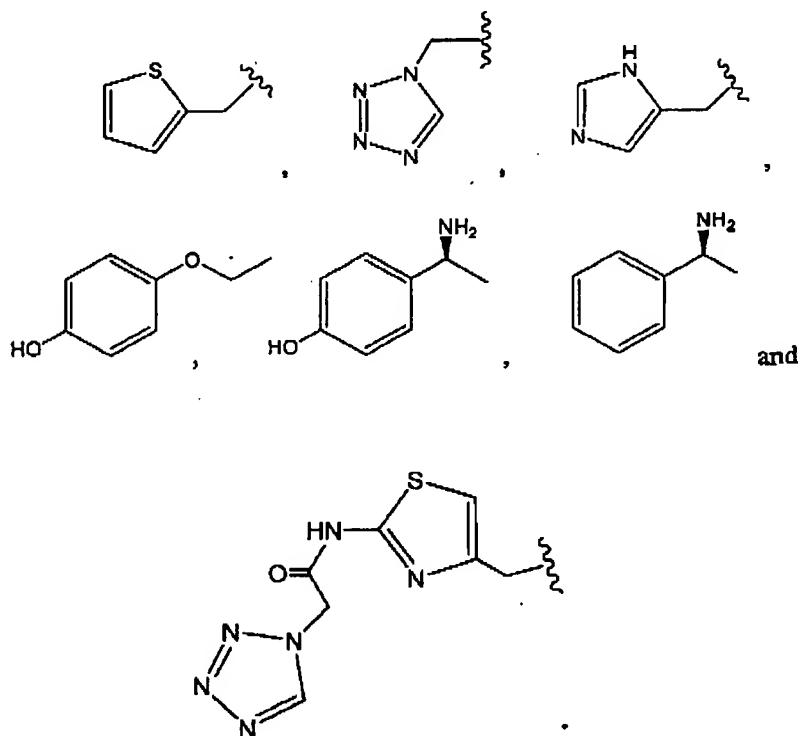


R^1 is selected from the group consisting of hydrogen, Li^+ , Na^+ , $(C_1 - C_6 \text{ alkyl})_m N(H)_{4-m}^+$ and polyethyleneglycolyl, wherein m is 0 – 3.

75. (Previously Added) The compound of claim 74, wherein n is 0.

76. (Previously Added) The compound of claim 75, wherein X is CH_2 .

77. (Previously Added) The compound of claim 76, wherein R is selected from the group consisting of: $NH_2C(=NH)NHCH_2CH_2$,



78. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid (Compound 9).

79. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(1-tetrazoleacetamido)-3-cephem-4-carboxylic acid (Compound 29).

80. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-(3*H*-imidazol-4-yl)]-acetamido-3-cephem-4-carboxylic acid (Compound 31).

81. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(1-phenyl-2-aminoacetamido)-3-cephem-4-carboxylic acid (Compound 38).

82. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[4-(2-aminothiazole)-yl-2-acetamido]-3-cephem-4-carboxylic acid (Compound 39).

83. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-(4-hydroxyphenoxy)acetamido]-3-cephem-4-carboxylic acid (Compound 40).

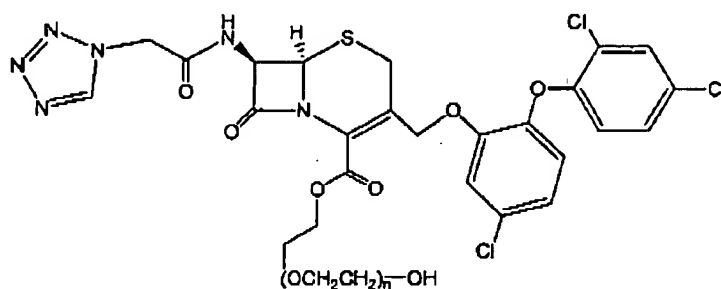
84. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-amino-2-(4-hydroxyphenyl)acetamido]-3-cephem-4-carboxylic acid (Compound 41).

85. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(3-guanidinylpropyl)acetamido-3-cephem-4-carboxylic acid (Compound 42).

86. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-{2-[2-(2-tetrazol-1-yl)-acetamido]-thiazol-5-yl]-acetamido}-3-cephem-4-carboxylic acid (Compound 43).

87. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-1-oxo-3-cephem-4-carboxylic acid (Compound 11).

88. (Previously Added) A compound has having the structure:

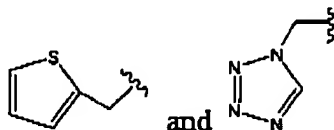


wherein n is 4 to 2000 (Compound 32).

89. (Previously Added) The compound of claim 74, wherein X is cis-CH=CHCH₂ or trans-CH=CHCH₂.

90. (Previously Added) The compound of claim 89, wherein R¹ is hydrogen.

91. (Previously Added) The compound of claim 90, wherein R is selected from the group consisting of



92. (Previously Added) The compound of claim 91, wherein n is 0.

93. (Currently Amended) A composition, comprising: a pharmaceutically acceptable carrier; ~~and, a compound of claim 74~~ and a compound of claim 74.

94. (Currently Amended) A method of inhibiting the growth of a ~~microorganism~~ bacterium comprising contacting the ~~microorganism~~ bacterium with an effective amount of a compound of any one of claims 74 to 93 ~~claim 74~~.

95. (Currently Amended) A method of inhibiting the growth of a ~~The method of~~ claim 94, wherein the microorganism ~~bacterium that~~ expresses a β -lactamase comprising contacting the bacterium with an effective amount of a compound of claim 74.

96. (Currently Amended) The method of claim 95, wherein the ~~microorganism~~ bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermidis* and other coagulase-negative staphylococci, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Streptococcus agalactiae*, *Enterococcus* species, *Corynebacterium diphtheriae*, *Listeria monocytogenes*, *Bacillus anthracis*, *Neisseria meningitidis*, *Neisseria gonorrhoeae*, *Moraxella catarrhalis*, *Vibrio cholerae*, *Campylobacter jejuni*, *Enterobacteriaceae*, *Pseudomonas aeruginosa*, *Acinetobacter* species, *Haemophilus influenzae*, *Clostridium tetani*, *Clostridium botulinum*, *Bacteroides* species, *Prevotella* species, *Porphyromonas* species, *Fusobacterium* species, *Mycobacterium tuberculosis*, and *Mycobacterium leprae*, with the proviso that when the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid, the microorganism is not *Pseudomonas aeruginosa*.

97. (Currently Amended) The method of claim 95, wherein the ~~microorganism~~ bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermis*, *Enterococcus faecalis* and *Enterococcus faecium*.

98. (Currently Amended) A method for treating a ~~microbial~~ bacterial infection, comprising administering to a subject in need thereof an effective amount of a compound of any one of claims 74 to 93 ~~claim 74~~.

99. (Currently Amended) A method for treating an infection of a ~~The method of claim 98, wherein the microorganism bacterium that expresses a β -lactamase comprising~~ contacting the bacterium with an effective amount of a compound of claim 74.

100. (Currently Amended) The method of claim 99, wherein the ~~microorganism bacterium~~ bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermidis* and other coagulase-negative staphylococci, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Streptococcus agalactiae*, *Enterococcus* species, *Corynebacterium diphtheriae*, *Listeria monocytogenes*, *Bacillus anthracis*, *Neisseria meningitidis*, *Neisseria gonorrhoeae*, *Moraxella catarrhalis*, *Vibrio cholerae*, *Campylobacter jejuni*, *Enterobacteriaceae*, *Pseudomonas aeruginosa*, *Acinetobacter* species, *Haemophilus influenzae*, *Clostridium tetani*, *Clostridium botulinum*, *Bacteroides* species, *Prevotella* species, *Porphyromonas* species, *Fusobacterium* species, *Mycobacterium tuberculosis*, and *Mycobacterium leprae*, with the proviso that when the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid, the microorganism is not *Pseudomonas aeruginosa*.

101. (Currently Amended) The method of claim 99, wherein the ~~microorganism bacterium~~ bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermis*, *Enterococcus faecalis* and *Enterococcus faecium*.